

**CONSTRUCTION PERMIT
and MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR QUALITY**

**Olympic Mill Services Division of Tube City, Inc.
154 East U. S. Highway 20
Chesterton, IN 46304**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 127-12473-00096	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: April 18, 2001

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary slag processing line.

Authorized Individual: James J. Shewell
Source Address: 154 East U. S. Highway 20, Chesterton, IN 46304
Mailing Address: Tube City, Inc. 1014 West Ninth Avenue King of Prussia, PA 19406
Phone Number: (610) 354-0600
SIC Code: 3295
County Location: Porter
County Status: Nonattainment area for ozone
Attainment area for all other criteria pollutants
Source Status: Minor Source Operating Permit
Minor Source, under PSD and Emission Offset Rules;
Area Source, Section 112 of the Clean Air Act

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

One slag processing line with a wet suppression system to control particulate matter emissions and a maximum feed rate of 150 tons of slag per hour, consisting of the following facilities:

- (a) One (1) Caterpillar 988 front loader;
- (b) One (1) feeder pan;
- (c) One (1) main conveyor with magnetic head pulley;
- (d) One (1) scrap conveyor;
- (e) One (1) slag shaker conveyor;
- (f) One (1) slag double deck screen;
- (g) One (1) slag shaker under belt;
- (h) One (1) ballast stacker;
- (i) One (1) scrap shaker conveyor;
- (j) One (1) oversized stacker;
- (k) One (1) fines stacker;
- (l) One (1) scrap double deck screen;
- (m) One (1) "C" scrap stacker;

- (n) One (1) "B" scrap stacker;
- (o) One (1) pit scrap stacker;
- (p) Two (2) unprocessed slag and scrap stockpiles, uncontrolled for particulate matter emissions;
- (q) Seven (7) processed slag and scrap stockpiles, uncontrolled for particulate matter emissions; and
- (r) One (1) diesel-powered generator (1.2 MMBtu/hr).

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If the Affidavit of Construction does not verify that the facilities covered in this Construction Permit were constructed as proposed in the application, then the Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section prior to beginning operation of the facilities.
- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (e) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in the validation letter. If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source potential to emit of PM₁₀, PM, SO₂, and CO are less than 250 tons per year. Therefore the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) The total source potential to emit VOC and NO_x are limited to less than 25 tons per year. Therefore, the requirements of 326 IAC 2-3 (Emission Offset) will not apply.
- (c) Any change or modification which may increase potential to emit to 250 tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.
- (d) Any change or modification which may increase potential to emit of VOC to 25 tons per year, 10 tons per year of any single hazardous air pollutant, twenty-five tons per year of any combination of hazardous air pollutants, or 100 tons per year of any other regulated pollutant from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.4 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by a notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.6 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.7 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.8 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.9 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan submitted by the permittee to IDEM on June 29, 2000.

Testing Requirements

C.10 Performance Testing [326 IAC 3-6]

- (a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source

submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.11 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

Record Keeping and Reporting Requirements

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 Annual Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting).
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

The submittal by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1.

C.16 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.17 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;

- (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.19 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

One slag processing line with a wet suppression system to control particulate matter emissions and a maximum feed rate of 150 tons of slag per hour, consisting of the following facilities:

- (a) One (1) Caterpillar 988 front loader;
- (b) One (1) feeder pan;
- (c) One (1) main conveyor with magnetic head pulley;
- (d) One (1) scrap conveyor;
- (e) One (1) slag shaker conveyor;
- (f) One (1) slag double deck screen;
- (g) One (1) slag shaker under belt;
- (h) One (1) ballast stacker;
- (i) One (1) scrap shaker conveyor;
- (j) One (1) oversized stacker;
- (k) One (1) fines stacker;
- (l) One (1) scrap double deck screen;
- (m) One (1) "C" scrap stacker;
- (n) One (1) "B" scrap stacker;
- (o) One (1) pit scrap stacker;
- (p) Two (2) unprocessed slag and scrap stockpiles, uncontrolled for particulate matter emissions;
- (q) Seven (7) processed slag and scrap stockpiles, uncontrolled for particulate matter emissions; and
- (r) One (1) diesel-powered generator (1.2 MMBtu/hr).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

Emission Limitations and Standards

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

The particulate matter (PM) from the slag processing operation shall not exceed 55 pounds per hour when operating at a process weight of 150 tons per hour

Interpolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

D.1.2 Fugitive Dust Emissions [326 IAC 6-4-2]

Pursuant to this rule, the Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). Observations of visible emissions crossing the property line of a source at or near ground level must be made by a qualified representative of IDEM [326 IAC 6-4-5(c)].

D.1.3 Fugitive Particulate Matter Emissions [326 IAC 6-5]

Pursuant to this rule, the permittee shall control PM emissions at the source according to the control plan required in 326 IAC 6-5-3, submitted to IDEM on June 29, 2000.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-1.1-11]

The Permittee is not required to test this emissions unit by this permit. However, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.1.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.6 Visible Emissions Notations

- (a) Daily visible emission notations of sources listed in (b) through (q) of the facility description source shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirement [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.7 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records of the results of the observations required under Condition D.1.6.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under
326 IAC 2-6.1-5(a)(5).

Company Name:	Olympic Mill Services Division of Tube City, Inc.
Address:	154 East U.S. Highway 20
City:	Chesterton, Indiana 46304
Phone #:	(219) 784-0004
MSOP #:	127-12473-00096

I hereby certify that Olympic Mill Services is ☒ still in operation.
☐ no longer in operation.

I hereby certify that Olympic Mill Services is ☒ in compliance with the requirements of MSOP 127-12473-00096.
☐ not in compliance with the requirements of MSOP 127-12473-00096.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ? _____, 25 TONS/YEAR SULFUR DIOXIDE ? _____, 25 TONS/YEAR NITROGEN OXIDES ? _____, 25 TONS/YEAR VOC ? _____, 25 TONS/YEAR HYDROGEN SULFIDE ? _____, 25 TONS/YEAR TOTAL REDUCED SULFUR ? _____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ? _____, 25 TONS/YEAR FLUORIDES ? _____, 100 TONS/YEAR CARBON MONOXIDE ? _____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ? _____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ? _____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ? _____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ? _____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO₂, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____
INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

PAGE 1 OF 2

Please note - This form should only be used to report malfunctions

**applicable to Rule 326 IAC 1-6 and to qualify for
the exemption under 326 IAC 1-6-4.**

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

Mail to: Permit Administration & Development Section
Office Of Air Management
100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

Olympic Mill Services
P.O. Box 830, U.S. Highway 12
Portage, Indiana 46368

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make
these representations on behalf of _____.
(Company Name)
4. I hereby certify that Olympic Mill Services, 154 East U.S. Highway 20, Chesterton, Indiana, 46304, has constructed the slag processing line in conformity with the requirements and intent of the construction permit application received by the Office of Air Management on July 20, 2000 and as permitted pursuant to Construction Permit No. MSOP-127-12473-00096.
5. Additional facilities were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of
Indiana on this _____ day of _____, 20 _____.

My Commission expires: _____

Signature

Name (typed or printed)

Section 10: Affidavit.wpd 2/00

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Source Construction and Minor Source Operating Permit

Source Name: Olympic Mill Services Division of Tube City, Inc.
Source Location: 154 East U.S. Highway 20 Chesterton, Indiana 46304
County: Porter
SIC Code: 3295
Operation Permit No.: MSOP 127-12473-00096
Permit Reviewer: ERG/DG

On December 11, 2000, the Office of Air Quality (OAQ) had a notice published in the Chesterton Tribune, Chesterton, Indiana, stating that the Olympic Mill Services Division of Tube City, Inc. (Tube City) had applied for a Source Construction and Minor Source Operating Permit (MSOP) to operate a stationary slag processing line. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Entire Document

As of January 1, 2001, the Office of Air Management is now known as the Office of Air Quality. The permit has been updated to reflect this name change.

Responses to Tube City Comments

On January 9, 2001 David R. Jordan, Environmental Resources Management Principal-in-Charge, submitted comments on behalf of Tube City regarding the proposed MSOP permit. The following is a summary of the comments. In the responses to the comments, additions to the permit are bolded for emphasis; the permit text with a line drawn through it has been deleted from the permit. The Table of Contents has been modified to reflect these changes.

Comment 1: Source Mailing Address

Tube City requests that the mailing address under item A.1 be changed to the following address since the Chesterton plant is not in operation at all times during the year.

Tube City, Inc.
1014 West Ninth Avenue
King of Prussia, PA 19406

Response to Comment 1:

The mailing address for the source has been changed to reflect the Tube City comment. Therefore, Section A.1 will be changed as follows:

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary slag processing line.

Authorized Individual: James J. Shewell
Source Address: 154 East U. S. Highway 20, Chesterton, IN 46304
Mailing Address: ~~P. O. Box 830, 6600 U. S. Highway 12 Portage, IN 46368~~
Tube City, Inc. 1014 West Ninth Avenue King of Prussia, PA 19406

Comment 2: Equipment Descriptions

The equipment description provided as a part of Condition A.2, the facility description in Section D.1, and the equipment descriptions in the Technical Support Document contain the description "with particulate matter emission controlled by wet suppression" following the description of each conveyor, stacker, or screen. Tube City is concerned that this description appears to imply that each conveyor, stacker, or screen has its own wet suppression system, while in reality there is a single system at the front end of the plant which applies water to material prior to its movement through the plant. As an alternative to the current language, Tube City suggests that the introduction to each of these sections be reworded to read "One slag processing line with a wet suppression system to control particulate matter emissions, with a maximum feed rate of 150 tons of slag per hour, ..."

With this language, Tube City believes that references to the wet suppression system for conveyor, stack, and screen may be deleted.

Response to comment 2:

The equipment descriptions in the permit have been changed to reflect the Tube City comments. Regarding Tube City's comments to change the Technical Support Document (TSD), the OAQ prefers that the TSD reflect the permit that was submitted for public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the TSD. Therefore, no change will be made to the TSD as a result of this comment.

Section A.2 of the permit will be changed as follows. Corresponding changes will be made to Section D.1 of the permit:

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

One slag processing line, **with a wet suppression system to control particulate matter emissions** and a maximum feed rate of 150 tons of slag per hour, consisting of the following facilities:

- (a) One (1) Caterpillar 988 front loader;
- (b) One (1) feeder pan, ~~with particulate matter emission controlled by wet suppression;~~
- (c) One (1) main conveyor with magnetic head pulley, ~~with particulate matter emission controlled by wet suppression;~~
- (d) One (1) scrap conveyor, ~~with particulate matter emission controlled by wet suppression;~~
- (e) One (1) slag shaker conveyor, ~~with particulate matter emission controlled by wet suppression;~~
- (f) One (1) slag double deck screen, ~~with particulate matter emission controlled by wet suppression;~~
- (g) One (1) slag shaker under belt, ~~with particulate matter emission controlled by wet suppression;~~
- (h) One (1) ballast stacker, ~~with particulate matter emission controlled by wet suppression;~~
- (i) One (1) scrap shaker conveyor, ~~with particulate matter emission controlled by wet suppression;~~

- (j) One (1) oversized stacker, ~~with particulate matter emission controlled by wet suppression;~~
- (k) One (1) fines stacker, ~~with particulate matter emission controlled by wet suppression;~~
- (l) One (1) scrap double deck screen, ~~with particulate matter emission controlled by wet suppression;~~
- (m) One (1) "C" scrap stacker, ~~with particulate matter emission controlled by wet suppression;~~
- (n) One (1) "B" scrap stacker, ~~with particulate matter emission controlled by wet suppression;~~
- (o) One (1) pit scrap stacker, ~~with particulate matter emission controlled by wet suppression;~~

Comment 3: Nitrogen Oxide Emissions

Condition C.1(d) states that an increase in nitrogen oxide (NO_x) emissions to 25 tons per year will subject the plant to Title V permit requirements. Tube City understands that the EPA has issued a waiver under Section 182(f) of the Clean Air Act for Lake and Porter County and the applicability limit should be 100 tons per year. Tube City requests that Condition C.1(d) be reworded to reflect the 100 ton per year threshold for Title V for NO_x emissions.

Response to comment 3:

IDEM agrees that this waiver has been granted. Changes to the permit Condition C.1 as a result of this comment are as follows:

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (d) Any change or modification which may increase potential to emit of VOC ~~or NO_x~~ to 25 tons per year, 10 tons per year of any single hazardous air pollutant, twenty-five tons per year of any combination of hazardous air pollutants, or 100 tons per year of any other regulated pollutant from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

Comment 4: Fugitive Dust Control Plan

Condition C.9 and the Technical Support Document (under State Rule Applicability - Individual Facilities, 326 IAC 6-5) states that Tube City is required to submit a fugitive dust control plan, while Condition D.1.3 states that Tube City submitted a plan with the application on 29 June 2000. Tube City requests that Condition C.9 and the Technical Support Document be revised to note that the required fugitive dust control plan has been submitted.

Response to comment 4:

As discussed in the response to Comment 2, changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the TSD. Therefore, no change will be made to the TSD as a result of this comment.

To remove the contradictory statement, Condition C.9 will be changed as follows:

C.9 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plan ~~to be~~ submitted by the permittee to IDEM **on June 29, 2000**.

Additional Revisions Made by IDEM

Upon further review, IDEM has decided to make the following changes:

(See following pages)

Section C

1. In Section C.5 paragraph (b), "an" should be replaced by "a."

C.5 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by ~~a an~~ notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

2. A compliance monitoring plan is required for this source because of the visible emissions monitoring requirement. This section was added. The numbering of following sections were revised accordingly.

C.13 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) **The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:**
 - (1) **This condition;**
 - (2) **The Compliance Determination Requirements in Section D of this permit;**
 - (3) **The Compliance Monitoring Requirements in Section D of this permit;**
 - (4) **The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and**
 - (5) **A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :**
 - (A) **Response steps that will be implemented in the event that compliance related information indicates that a response step is**

needed pursuant to the requirements of Section D of this permit;
and

- (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

Section D.1

1. A preventive maintenance plan is required because the source uses a control device (wet suppression) for PM emissions and the allowable emissions exceed 10 pounds per hour. The numbering of following sections and section references were revised accordingly.

D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

2. Section D.1.6 will be revised as follows to specify where the visible emission observations must be made. Sources listed under (a) and (r) are not included in Section D.1.6 because there are no requirements for these sources.

D.1.56 Visible Emissions Notations

-
- (a) Daily visible emission notations of the sources **listed in (b) through (q) of the facility description** shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name: Olympic Mill Services Division of Tube City, Inc.
Source Location: 154 East US Highway 20, Chesterton, Indiana 46304
County: Porter
SIC Code: 3295
Operation Permit No.: 127-12473-00096
Permit Reviewer: ERG/DG

The Office of Air Management (OAM) has reviewed an application from Olympic Mill Services relating to the construction and operation of a slag processing source.

Permitted Emission Units and Pollution Control Equipment

The source does not contain any permitted emission units and pollution control devices.

Unpermitted Emission Units and Pollution Control Equipment

The source consists of the following unpermitted facilities/units:

One slag processing line, with a maximum feed rate of 150 tons of slag per hour, consisting of the following facilities:

- (a) One (1) Caterpillar 988 front loader;
- (b) One (1) feeder pan, with particulate matter emission controlled by wet suppression;
- (c) One (1) main conveyor with magnetic head pulley, with particulate matter emission controlled by wet suppression;
- (d) One (1) scrap conveyor, with particulate matter emission controlled by wet suppression;
- (e) One (1) slag shaker conveyor, with particulate matter emission controlled by wet suppression;
- (f) One (1) slag double deck screen, with particulate matter emission controlled by wet suppression;
- (g) One (1) slag shaker under belt, with particulate matter emission controlled by wet suppression;
- (h) One (1) ballast stacker, with particulate matter emission controlled by wet suppression;
- (i) One (1) scrap shaker conveyor, with particulate matter emission controlled by wet suppression;

- (j) One (1) oversized stacker, with particulate matter emission controlled by wet suppression;
- (k) One (1) fines stacker, with particulate matter emission controlled by wet suppression;
- (l) One (1) scrap double deck screen, with particulate matter emission controlled by wet suppression;
- (m) One (1) "C" scrap stacker, with particulate matter emission controlled by wet suppression;
- (n) One (1) "B" scrap stacker, with particulate matter emission controlled by wet suppression;
- (o) One (1) pit scrap stacker, with particulate matter emission controlled by wet suppression;
- (p) Two (2) unprocessed slag and scrap stockpiles, uncontrolled for particulate matter emissions;
- (q) Seven (7) processed slag and scrap stockpiles, uncontrolled for particulate matter emissions; and
- (r) One (1) diesel-powered generator (1.2 MMBtu/hr).

Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled Unpermitted Emission Units and Pollution Control Equipment.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 10, 2000, with additional information received on August 30, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 4).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	34.5
PM-10	16.9
SO ₂	1.5
VOC	1.8
CO	4.8
NO _x	22.4

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM-10, SO₂, and CO are less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7 but the source is subject to 326 IAC 2-6.1.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC and NO_x are less than 25 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

Actual Emissions

No previous emission data has been received from the source.

County Attainment Status

The source is located in Porter County.

Pollutant	Status
PM-10	Attainment
SO ₂	Unclassifiable
NO ₂	Attainment
Ozone	Severe
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Porter County has been designated as nonattainment for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Porter County has been classified as attainment or unclassifiable for all other pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	34.5
PM10	16.9
SO ₂	1.5
VOC	1.8
CO	4.8
NO _x	22.4
Single HAP	0

Pollutant	Emissions (ton/yr)
Combination HAPs	0

This source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater, NO_x and VOC are not emitted at a rate of 25 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2 and 2-3, and 40 CFR 52.21, the PSD and Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) Each criteria pollutant is less than 100 tons per year,
- (b) A single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) Any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source. The Standards of Performance for Nonmetallic Mineral Processing Plants (40 CFR Subpart OOO) do not apply to this source because the source does not contain any crushers or grinders (see 40 CFR 60.670(a)(2)).
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year (for Porter County) of NO_x. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the slag processing operation shall not exceed 55 pounds per hour when operating at a process weight of 150 tons per hour

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Based on the uncontrolled emission factors from AP-42 and the maximum operating hours per year (8,760), the PM emissions from this source will not be greater than 7.29 pounds per hour. Therefore, the source complies with this rule.

326 IAC 6-4 (Fugitive Dust Emissions)

Pursuant to this rule, the permittee shall be in violation of 326 IAC 6-4 (Fugitive Dust Emissions) if any of the criteria specified in 326 IAC 6-4-2(1) through (4) are violated. Observations of visible emissions crossing the property line of a source at or near ground level must be made by a qualified representative of IDEM [326 IAC 6-4-5(c)].

326 IAC 6-5 (Fugitive Particulate Matter Emissions)

Pursuant to this rule, the permittee shall control PM emissions at the source according to the control plan required in 326 IAC 6-5-3, to be submitted by the permittee to IDEM.

Conclusion

The construction and operation of this slag process operation shall be subject to the conditions of the attached proposed New Source Construction and Minor Source Operating Permit 127-12473-00096.

Appendix A: Emissions Calculations
Particulates from Loading, Transfer Points, and Screening Operations

Page 1 of 4 TSD App A

Company Name: Olympic Mill Services
Address City in Zip: 154 East U.S. Highway 20, Chesterton, IN 46304
MSOP: 127-12473
Pit ID: 00096
Reviewer: ERG/DG
Date: 08/07/2000

Operations	References	Uncontrolled Emission Factors		Controlled Emission Factors		Hours of Production	Feed (%)	Production (tons/hour)	Uncontrolled Emissions		Controlled Emissions		Production (tons/year)	Uncontrolled Emissions		Controlled Emissions	
		PM EF (lbs/ton)**	PM-10 EF (lbs/ton)	PM EF (lbs/ton)**	PM-10 EF (lbs/ton)				PM (lbs/hour)	PM-10 (lbs/hour)	PM (lbs/hour)	PM-10 (lbs/hour)		PM (tons/year)	PM-10 (tons/year)	PM (tons/year)	PM-10 (tons/year)
Cat 988 loader to feeder pan w/ grizzly (1)	1	0.00666	0.00315	0.00666	0.00315	8760	100	150	0.999	0.473	0.999	0.473	1314000	4.376	2.070	4.376	2.070
Pan grizzly (1) to +10' O/S pit scrap stockpile	1	0.00666	0.00315	0.000986	0.000466	8760	1.24	1.9	0.013	0.006	0.002	0.001	16644	0.055	0.026	0.008	0.004
Pan grizzly (1) to main conveyor w/ magnetic head pulley splitter (2)	2	0.00294	0.0014	0.000101	0.000048	8760	98.76	146.3	0.430	0.205	0.015	0.007	1281588	1.884	0.897	0.065	0.031
Main conveyor w/ magnetic head pulley splitter (2) to scrap conveyor (6)	2	0.00294	0.0014	0.000101	0.000048	8760	50	73.2	0.215	0.102	0.007	0.004	641232	0.943	0.449	0.032	0.015
Scrap conveyor (6) to scrap shaker conveyor (10)	2	0.00294	0.0014	0.000101	0.000048	8760	100	73.2	0.215	0.102	0.007	0.004	641232	0.943	0.449	0.032	0.015
Scrap shaker conveyor (10) to pit scrap stacking conveyor (3)	2	0.00294	0.0014	0.000101	0.000048	8760	20	14.6	0.043	0.020	0.001	0.001	127896	0.188	0.090	0.006	0.003
Pit scrap stacking conveyor (3) to pit scrap stockpile	1	0.00666	0.00315	0.000986	0.000466	8760	100	14.6	0.097	0.046	0.014	0.007	127896	0.426	0.201	0.063	0.030
Scrap shaker conveyor (10) to scrap double screen deck (12)	2	0.00294	0.0014	0.000101	0.000048	8760	80	58.5	0.172	0.082	0.006	0.003	512460	0.753	0.359	0.026	0.012
Scrap double screen deck (12) to B-scrap stacking conveyor (4)	3	0.0315	0.015	0.001764	0.00084	8760	62.5	36.6	1.153	0.549	0.065	0.031	320616	5.050	2.405	0.283	0.135
B-scrap stacking conveyor (4) to B-scrap stockpile	1	0.00666	0.00315	0.000986	0.000466	8760	100	36.6	0.244	0.115	0.036	0.017	320616	1.068	0.505	0.158	0.075
Double screen deck (12) to C-scrap stacking conveyor (5)	2	0.00294	0.0014	0.000101	0.000048	8760	37.5	21.9	0.064	0.031	0.002	0.001	191844	0.282	0.134	0.010	0.005
C-scrap stacking conveyor (5) to C-scrap stockpile	1	0.00666	0.00315	0.000986	0.000466	8760	100	21.9	0.146	0.069	0.022	0.010	191844	0.639	0.302	0.095	0.045
Main conveyor w/ magnetic head pulley splitter (2) to slag shaker conveyor (11)	2	0.00294	0.0014	0.000101	0.000048	8760	50	73.2	0.215	0.102	0.007	0.004	641232	0.943	0.449	0.032	0.015
Slag shaker conveyor (11) to O/S stacking conveyor (9)	2	0.00294	0.0014	0.000101	0.000048	8760	40	29.3	0.086	0.041	0.003	0.001	256668	0.377	0.180	0.013	0.006
O/S stacking conveyor (9) to O/S stockpile	1	0.00666	0.00315	0.000986	0.000466	8760	100	29.3	0.195	0.092	0.029	0.014	256668	0.855	0.404	0.127	0.060
Slag shaker conveyor (11) to slag double deck screen (13)	2	0.00294	0.0014	0.000101	0.000048	8760	60	43.9	0.129	0.061	0.004	0.002	384564	0.565	0.269	0.019	0.009
Slag double deck screen (13) to ballast slag stacking conveyor (8)	3	0.0315	0.015	0.001764	0.00084	8760	58.33	25.6	0.806	0.384	0.045	0.022	224256	3.532	1.682	0.198	0.094
Ballast slag stacking conveyor (8) to ballast slag stockpile	1	0.00666	0.00315	0.000986	0.000466	8760	100	25.6	0.170	0.081	0.025	0.012	224256	0.747	0.353	0.111	0.052
Slag double deck screen (13) to slag shaking conveyor underbelt (14)	2	0.00294	0.0014	0.000101	0.000048	8760	41.67	18.3	0.054	0.026	0.002	0.001	160308	0.236	0.112	0.008	0.004
Slag shaking conveyor underbelt (14) to fines stacking conveyor (7)	2	0.00294	0.0014	0.000101	0.000048	8760	100	18.3	0.054	0.026	0.002	0.001	160308	0.236	0.112	0.008	0.004
Fines stacking conveyor (7) to fines stockpile	1	0.00666	0.00315	0.000986	0.000466	8760	100	18.3	0.122	0.058	0.018	0.009	160308	0.534	0.252	0.079	0.037
Totals									5.623	2.671	1.312	0.621		24.629	11.700	5.749	2.721

References:

1. PM-10 emission factors for loading from raw material storage to plant and loading from plant to product storage areas: $EF = k \cdot (0.0032)^{(u/5)^{1.3}} / ((m/2)^{1.4})$

Variable	Value	Units	Comments
k =	0.74		Particle size multiplier <30um (AP-42, Table 13.2.4-3, 1/95)
	0.35		Particle size multiplier <10um (AP-42, Table 13.2.4-4, 1/95)
u =	4.8	mph	Mean wind speed (annual). Data obtained from the National Weather Service.
m =	0.92	%	Material moisture content (AP-42, Table 13.2.4-1, 1/95)
	3.6	%	Material moisture content (AP-42, Table 13.2.4-1, 1/95)

2. PM-10 emission factors from transfer points (AP-42, Table 11.19.2-2) :

Uncontrolled = 0.0014 lbs/ton
Controlled = 0.000048 lbs/ton

3. PM-10 emission factors for screening (AP-42, Table 11.19.2-2) :

Uncontrolled = 0.015 lbs/ton
Controlled = 0.00084 lbs/ton

**** PM values estimated as 2.1 * PM-10 value.**

Emissions (lbs/hour) = EF (lbs/ton) * Production (tons/hour)

Emissions (tons/year) = EF (lbs/ton) * Production (tons/year) / 2000 lbs/ton

Appendix A: Emissions Calculations
Particulates from Loading and Unloading Operations at Stockpiles
Company Name: Olympic Mill Services
Address City in Zip: 154 East U.S. Highway 20, Chesterton, IN 46304
MSOP: 127-12473
Pit ID: 00096
Reviewer: ERG/DG
Date: 08/07/2000

Stockpile	References	Uncontrolled Emission Factors		Controlled Emission Factors		Hours of Production	Production (tons/hour)	Uncontrolled Emissions		Controlled Emissions		Production (tons/year)	Uncontrolled Emissions		Controlled Emissions	
		PM EF (lbs/ton)**	PM-10 EF (lbs/ton)	PM EF (lbs/ton)**	PM-10 EF (lbs/ton)			PM (lbs/hour)	PM-10 (lbs/hour)	PM (lbs/hour)	PM-10 (lbs/hour)		PM (tons/year)	PM-10 (tons/year)	PM (tons/year)	PM-10 (tons/year)
Unprocessed EAF Slag and Scrap - North Stockpile	1	0.00666	0.00315	0.00666	0.00315	8760	100	0.666	0.315	0.666	0.315	876000	2.92	1.38	2.92	1.38
Unprocessed EAF Slag and Scrap - South Stockpile	1	0.00666	0.00315	0.00666	0.00315	8760	100	0.666	0.315	0.666	0.315	876000	2.92	1.38	2.92	1.38
Processed +10' O/S EAF Pit Scrap	2	0.0009862	0.000466	0.0009862	0.000466	8760	2.5	0.00247	0.00117	0.00247	0.00117	21900	0.0108	0.00510	0.0108	0.00510
Processed 6" x 3/8" EAF Pit Scrap	2	0.0009862	0.000466	0.0009862	0.000466	8760	19.5	0.0192	0.00909	0.0192	0.00909	170820	0.0842	0.0398	0.0842	0.0398
Processed EAF B-Scrap	2	0.0009862	0.000466	0.0009862	0.000466	8760	48.8	0.0481	0.0227	0.0481	0.0227	427488	0.211	0.100	0.211	0.100
Processed EAF C-Scrap	2	0.0009862	0.000466	0.0009862	0.000466	8760	29.3	0.0289	0.0137	0.0289	0.0137	256668	0.127	0.0598	0.127	0.0598
Processed 2 1/2" x 1" EAF O/S Slag	2	0.0009862	0.000466	0.0009862	0.000466	8760	39	0.0385	0.0182	0.0385	0.0182	341640	0.168	0.0796	0.168	0.0796
Processed 1" x 3/8" EAF Ballast Slag	2	0.0009862	0.000466	0.0009862	0.000466	8760	58.9	0.0581	0.0274	0.0581	0.0274	515964	0.254	0.120	0.254	0.120
Processed 3/8" x 0 EAF C-Fines Slag	2	0.0009862	0.000466	0.0009862	0.000466	8760	97.5	0.0962	0.0454	0.0962	0.0454	854100	0.421	0.199	0.421	0.199
Totals								1.623	0.768	1.623	0.768	4340580	7.111	3.363	7.111	3.363

References:

- PM emission factors for unloading raw material to storage piles and loading of product from storage piles (1995 AP-42, 13.2.4.3, Eq. 1): $EF = k \cdot (0.0032) \cdot ((u/5)^{1.3}) / ((m/2)^{1.4})$

Variable	Value	Units	Comments
k =	0.74		Particle size multiplier <30um (AP-42, Table 13.2.4-3, 1/95)
	0.35		Particle size multiplier <10um (AP-42, Table 13.2.4-4, 1/95)
u =	4.8	mph	Mean wind speed (annual). Data obtained from the National Weather Service.
m =	0.92	%	Raw material moisture content (AP-42, Table 13.2.4-1, 1/95)
	3.6	%	Processed material moisture content (AP-42, Table 13.2.4-1, 1/95)

- 1995 AP-42, 13.2.4.3, Eq. 1. There is no net reduction for this reference. The values from Reference 1 were used in this emission calculation.

Emissions (lbs/hour) = EF (lbs/ton) * Production (tons/hour)
Emissions (tons/year) = EF (lbs/ton) * Production (tons/year) / 2000 lbs/ton

**Appendix A: Emissions Calculations
Particulates from Unpaved Roads**

Company Name: Olympic Mill Services
Address City in Zip: 154 East U.S. Highway 20, Chesterton, IN 46304
MSOP: 127-12473
Pit ID: 00096
Reviewer: ERG/DG
Date: 08/07/2000

Section of Road	Vehicle	Distance (miles)	Number of One Way Trips per Hour	Number of Hours	Number of One Way Trips per Year	Number of Return Trips per Year	Vehicle Miles Travelled
NW Gate to Personnel Trailer	Passenger Car	0.028	0.08	8760	730	1460	40.88
NW Gate to Processing Area	Pickup Truck	0.072	0.04	8760	365	730	52.56
NW Gate to Processing Area	Utility Truck	0.072	0.08	8760	730	1460	105.12
NW Gate to North Raw Slag Feed Stockpile	Tandem/Dump	0.047	0.27	8760	2382	4764	223.91
NW Gate to South Raw Slag Feed Stockpile	Tandem/Dump	0.08	0.27	8760	2382	4764	381.12
Raw Slag from North Stockpile to Screening Plant	Cat 988	0.07	1.03	8760	9000	18000	1260.00
Raw Slag from South Stockpile to Screening Plant	Cat 988	0.019	1.03	8760	9000	18000	342.00
Pit Scrap from Plant to NW Gate	Tandem/Dump	0.047	0.01	8760	59	118	5.55
Processed Slag (all grades) from Processing Plant to NW Gate	Tandem/Dump	0.091	0.27	8760	2353	4706	428.25
Processed Slag (all grades) from Processing Plant to NW Gate	Tandem/Dump	0.07	0.27	8760	2353	4706	329.42
Totals							3168.80

Vehicle Type	Weight (tons)	Percentage of Site Traffic (%)	Average Speed (mph)
Passenger Car	2	1.31	7
Pick-up Truck	4	1.66	7
Utility Truck	8	3.32	7
Tandem/Dump	43.5	42.98	4.5
Cat 988	59	50.56	4.5

Average Weight = 48.89 tons

Average Speed = 4.65 mph

The following calculations determine the amount of emissions created by unpaved roads, based on 8760 hours of use and AP-42, Ch 13.2.2 (Supplement E, 9/98)

$$\begin{aligned}
 &8760 \text{ hr/yr} = 3168.8 \text{ miles per year maximum} \\
 &\text{PM}_{10} \\
 &E_f = \left(\left(k \cdot \left(\frac{s}{12} \right)^{.8} \right) \cdot \left[\frac{(W/3)^b}{(M/.2)^c} \right] \right) \cdot (S/15) \\
 &= 0.20 \text{ lb/mile} \\
 &\text{where } k = 2.6 \text{ ticle size multiplier} \\
 &s = 1.5 \% \text{ silt content of unpaved roads} \\
 &S = 4.65 \text{ mph} \\
 &M = 3.6 \text{ surface material moisture content under dry, uncontrolled conditions, \% (0.2 default)} \\
 &W = 49 \text{ tons average vehicle weight} \\
 &\frac{0.20 \text{ lb/mi} \times 3168.8 \text{ mi/yr}}{2000 \text{ lb/ton}} = 0.3107 \text{ tons/yr} \\
 &\text{PM}_{30} \\
 &E_f = \left(\left(k \cdot \left(\frac{s}{12} \right)^{.8} \right) \cdot \left[\frac{(W/3)^b}{(M/.2)^c} \right] \right) \cdot (S/15) \\
 &= 0.75 \text{ lb/mile} \\
 &\text{where } k = 10 \text{ ticle size multiplier} \\
 &s = 1.5 \% \text{ silt content of unpaved roads} \\
 &S = 4.65 \text{ mph} \\
 &M = 3.6 \text{ surface material moisture content under dry, uncontrolled conditions, \% (0.2 default)} \\
 &W = 49 \text{ tons average vehicle weight} \\
 &\frac{0.75 \text{ lb/mi} \times 3168.8 \text{ mi/yr}}{2000 \text{ lb/ton}} = 1.1835 \text{ tons/yr}
 \end{aligned}$$

**Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel**

Page 4 of 4 TSD App A

Company Name: Olympic Mill Services
Address City IN Zip: 154 East U.S. Highway 20, Chesterton, IN 46304
MSOP: 127-12473
Pit ID: 00096
Reviewer: ERG/DG
Date: 08/08/2000

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity
MM Btu/hr

1.2

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.31	0.31	0.29	4.41	0.4	0.95
Potential Emission in tons/yr	1.57	1.57	1.47	22.39	1.83	4.82

B. Emissions calculated based on output rating (hp)

Heat Input Capacity
Horsepower (hp)

Potential Throughput
hp-hr/yr

113.0

989880.0

Emission Factor in lb/hp-hr	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067
Potential Emission in tons/yr	1.09	1.09	1.01	15.34	1.24	3.31

Methodology

Potential Throughput (hp-hr/yr) = hp * 8760 hr/yr

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-2

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

*PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

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updated 4/99